

ABSTRACT

A new design is provided for the heat spreader of a semiconductor package. Grooves are provided in a surface of the heat spreader, subdividing the heat spreader for purposes of stress distribution into four or more sections. This division of the heat spreader results in a reduction of the mechanical and thermal stress that is introduced by the heat spreader into the device package. Mechanical and heat stress, using conventional heat spreader designs, has a negative, stress induced, effect on the semiconductor die, on the contact points (bump joints) of the semiconductor die and on the solder ball connections of the package.